

ENGINEERING PRACTICE STUDY
PROJECT NUMBER: 5998-2010-009

TITLE:

Review of Non-Government Standard IPC-2221
to Determine the Validity of Its DoD Adoption.

24 November 2009

FINAL REPORT

Prepared by:

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ATTCH 3

I. **OBJECTIVES:** The objective of this study was to review reference document sections of all Federal Stock Classes (FSC) documents (using ASSIST) for guidance on retaining non-Government standard IPC-2221 as viable and appropriate for citing in electronic component standardization documents.

II. **BACKGROUND:** IPC-2221, "Generic Standard on Printed Board Design", was adopted on 01 September 1999 and the DoD notice of adoption has not been revised since that date. IPC-2221 was developed and published its non-Government standard body (NGSB), the IPC – Association Connecting Electronics Industries. The NGSB committee responsible for IPC-2221 meets regularly twice a year and DSCC attends the meetings to assist in keeping the document current and to monitor its content and status. This study is part of a 5-year review of the DoD adoption notice for IPC-2221 for validity and accuracy.

III. **RESULTS:** A review of the actual notice of adoption that is on the ASSIST web site uncovered mistakes in the information regarding out of date information for the Federal Stock Class (FSC), the title of the NGS, the point of contact data for both the NGSB and DSCC, and the notice also needs to be brought up to the current document format. A review using ASSIST to search for use of IPC-2221 within DoD documents resulted in 12 direct reference by DoD standardization documents. The NGS is referenced in two FSC 5935 documents: MIL-DTL-39024 "Jack, Tip (Test Point, Panel Or Printed Wiring Type), General Specification For", and MIL-DTL-83505/6 "Sockets, (Lead, Electric Components) Type VI, Solderless Spring Contact"; one FSC 5985 document: MIL-DTL-29563 "Antenna System, Aims Shipboard, Electronically Steered OE-120/UPX"; one FSC 5995 document: MIL-DTL-22442 "Cable Assemblies, Aircraft Audio, General Specification for"; and the following eight documents in FSC 5998: MIL-PRF-31032/1 , MIL-PRF-31032/2, MIL-PRF-31032/3, MIL-PRF-31032/4, MIL-PRF-31032/5, MIL-PRF-31032/6, MIL-P-50884, and MIL-PRF-55110.

The following is a compilation of the errors in the adoption notice on the ASSIST web site. The NGSB name and address on the adoption notice are also incorrect since the NGSB has changed its name since the adoption notice was issued. Another error is that the title of NGS is incorrect. The point of contact data for DSCC is also incorrect and needs to be updated. The Air Force custodian has changed from code 11 to code 85.

IV. **CONCLUSION:** Based on its citation by in the DoD standardization document listed in section III above, IPC-2221 is a valued design related document that benefits the DoD standardization program.

V. **RECOMMENDATION:** IPC-2221, "Generic Standard on Printed Board Design" (the current title of the NGS), should continue to be available for citing by DoD standardization documents. Therefore, the adoption notice for IPC-2221 shall be retained as an active, valid document. Attachment 1 is the DSCC prepared notice of adoption submitted to DAPS in 1999. Attachment 2 is the document that is currently available on the ASSIST web site. An updated notice of adoption with should be generated and forwarded to DAPS with current NGSB and DoD contact data. Attachment 3 is a proposed draft highlighting the errors (red highlighted text with strike-out) and corrections and the correct data (yellow highlighted text) that should be made to the notice of adoption for IPC-2221.

ADOPTION NOTICE

IPC-2221 "Generic Standard on Printed Board Design," was adopted on 1 September 1999 for use by the Department of Defense (DoD). Proposed changes by DoD activities must be submitted to the DoD Adopting Activity: Defense Supply Center Columbus, ATTN: DSCC-VAC, 3990 East Broad Street, Columbus, OH 43216-1199. DoD activities may obtain copies of this standard from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094. The private sector and other Government agencies may purchase copies from the Association Connecting Electronics Industries, 2215 Sanders Avenue, Northbrook, IL 60062-6135

Custodians:

Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5998-0092)

ADOPTION NOTICE

IPC-2221, "Printed Board Design, Generic Standard for", was adopted on 01-SEP-99 for use by the Department of Defense (DoD). Proposed changes by DoD activities must be submitted to the DoD Adopting Activity: Defense Supply Center Columbus, P.O. Box 3990, Attn: DSCC-VAI, Columbus, OH 43216-5000. Copies of this document may be purchased from the Institute for Interconnecting and Packaging Electronic Circuits, 2215 Sanders Road, Northbrook, IL 60062-6135. <http://www.ipc.org/>

Custodians:

Army - CR
Navy - EC
Air Force - 11
DLA - CC

Adopting Activity:

DLA - CC

ADOPTION NOTICE

IPC-2221, "~~Printed Board Design, Generic Standard for~~ Generic Standard on Printed Board Design", was adopted on ~~04-SEP-99~~ 1 September 1999 for use by the Department of Defense (DoD). Proposed changes by DoD activities must be submitted to the DoD Adopting Activity: Defense Logistics Agency, Defense Supply Center Columbus, P.O. Box 3990, ATTN: ~~DSCC-VA~~ DSCC-VAC, Columbus, OH ~~43216-5000~~ 43218-3990 or 5998.Documents@dla.mil. Copies of this document may be purchased from the ~~Institute for Interconnecting and Packaging Electronic Circuits, 2215 Sanders Road, Northbrook, IL 60062-6135~~ IPC - Association Connecting Electronics Industries, 3000 Lakeside Drive, Suite 309 S, Bannockburn, IL 60015-1249 or <http://www.ipc.org>.

Custodians:
Army - CR
Navy - EC
Air Force - ~~14~~ 85
DLA - CC

Adopting Activity:
DLA - CC

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.daps.dla.mil/>.